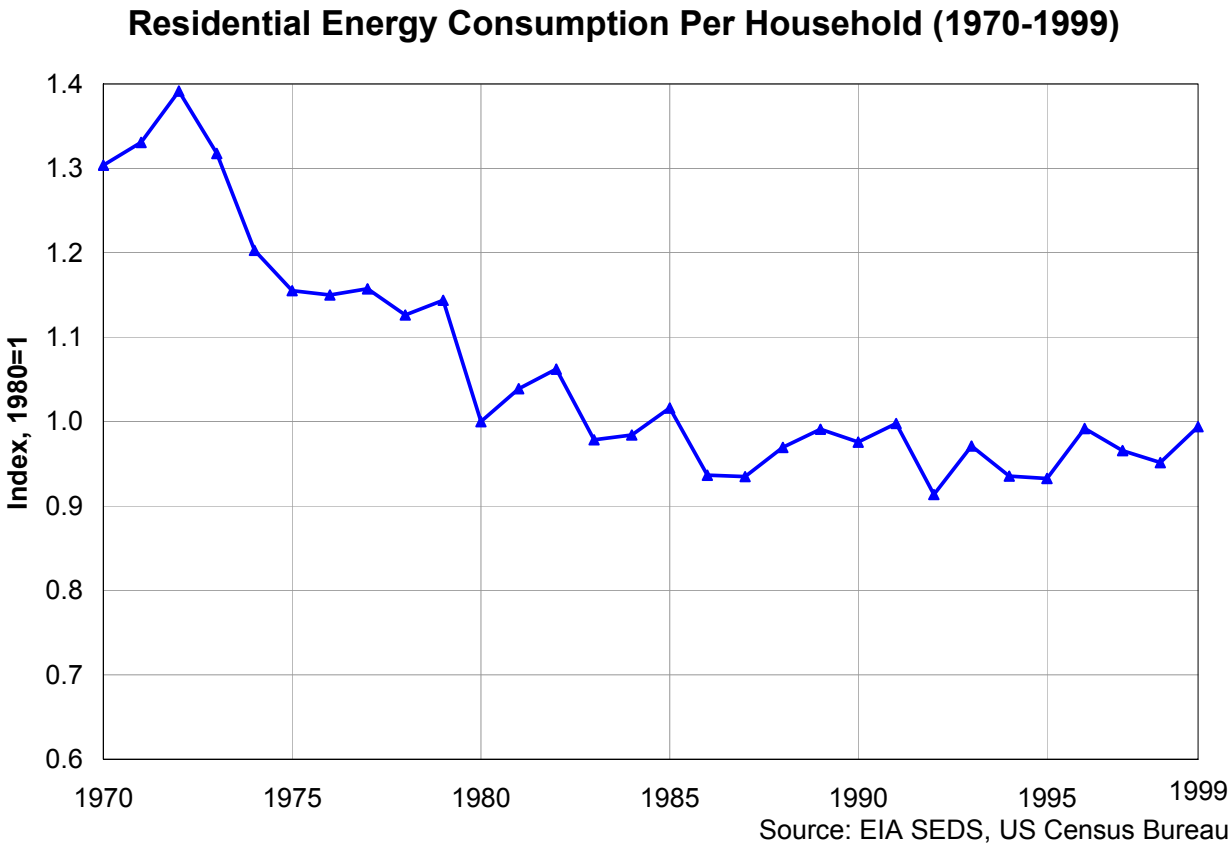
9. Residential Sector Trends — Household Energy Intensity



ENERGY CONSUMPTION PER WASHINGTON HOUSEHOLD DECLINED BY A THIRD BETWEEN 1972 AND 1987, INDICATING AN IMPROVEMENT IN HOUSEHOLD ENERGY EFFICIENCY. THERE HAS BEEN NO GAIN SINCE. CONSUMPTION PER HOUSEHOLD IN 1999 WAS SIMILAR TO 1985.

Washington households became much more energy efficient between 1972 and 1987, but there has been no improvement in efficiency since. The 1970s were characterized by diminished oil and natural gas consumption, with natural gas use per household falling by 33% between 1970 and 1980. Oil consumption dropped from 300 gallons per household in 1970 to 85 in 1983, with half the decline occurring after the second oil shock in 1978. The data indicate an increased reliance on wood and electricity as space heating fuels during the late 1970s and early 1980s.

Concerted efforts to improve residential efficiency through building standards and codes began in earnest in the mid-80s. However, there is little evidence of further declines in household energy use during this period. Presumably gains in efficiency due to building standards and codes are being offset by larger homes, more widespread use of air conditioning, and the significant proliferation of electricity-using appliances. Note that these data do not include energy used for personal transportation, which has increased markedly during the last fifteen years.